PART 70 MINOR SOURCE MODIFICATION
OFFICE OF AIR MANAGEMENT

Grote Industries, Inc.
2600 Lanier Drive
Madison, Indiana 47250

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 077-11312-00003	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary plastic and metal automotive parts manufacturing plant.

Responsible Official:	James L. Braun
Source Address:	2600 Lanier Drive, Madison, Indiana 47250
Mailing Address:	PO Box 1550, Madison, Indiana 47250
SIC Code:	3647
County Location:	Jefferson County
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under PSD Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following emission units and pollution control devices:

(a) One (1) Robot Plastic Parts Paint Spray Booth, with a maximum capacity of 600 units per hour, exhausting to stack 3-45 and utilizing dry filters as a control device.

(b) One (1) Natural Gas Fired Oven with a maximum heat input capacity of .021 MMBtu/hr, exhausting to stack 3-46.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Visible Emission Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this approval:

(a) Visible Emissions shall not exceed an average of forty percent (40%) opacity in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Visible Emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

Testing Requirements [326 IAC 2-7-6(1)]

C.6 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval.

All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.7 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this approval. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.8 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.9 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.10 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this approval shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this approval is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this approval.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.11 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this approval, and whether a deviation from an approval condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.12 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]
The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.
One Plastic Painting Process consisting of the following emission units:

(a) One (1) Robot Spray Booth, with a maximum unit capacity of 600 pieces per hour, using dry filters as control, and exhausting to stack 3-45.
(b) One (1) Natural Gas Oven with a maximum heat input capacity of 0.021 MMBtu/hr, exhausting to stack 3-46.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Maximum Achievable Control Technology [326 IAC 2-4.1-1]

Hazardous Air Pollutants (HAPs) shall be limited to less than ten (10) tons per twelve (12) consecutive months for a single HAP and less than twenty-five (25) tons per year for any combination of HAPs. Compliance with this limit shall render 326 IAC 2-4.1-1 (Maximum Achievable Control Technology) and 40 CFR 63.43 (Maximum Achievable Control Technology) not applicable.

D.1.2 Best Available Control Technology [326 IAC 8-1-6]

The input of VOC to the plastic parts surface coating booth, shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period including coatings, dilution solvents, and cleaning solvents minus any VOC solvent shipped out. This usage limit is required to limit the potential to emit of VOC to less than twenty-five (25) tons per twelve (12) consecutive month period from each booth. Compliance with this limit shall render 326 8-1-6 (Best Available Control Technology), and 40 CFR 52.21 not applicable. Compliance with this VOC limit will also render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.3 Particulate matter [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) emission rate from the plastic parts surface coating booth shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

The dry filters shall be in operation at all times the surface coating booths are in operation, in order to comply with this limit.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the HAPS, VOC, and Particulate Matter limits specified in Condition D.1.1, D.1.2, D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.6 HAP Emissions

Compliance with Condition D.1.1 shall be demonstrated at the end of each month based on the total HAP usage minus any solvents shipped out for the most recent twelve (12) consecutive month period.

D.1.7 Volatile Organic Compounds (VOC)

Compliance with the VOC usage limitations contained in Conditions D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.8 VOC Emissions

Compliance with Condition D.1.2 shall be demonstrated at the end of each month based on the total volatile organic compound usage minus any solvents shipped out for the most recent twelve (12) consecutive month period.

D.1.9 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the corresponding booth is in operation for the one (1) Robot Spray paint booth.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.10 Monitoring

(a) Daily inspections shall be preformed to verify the placement, integrity, and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stack (3-45) while the booth is in operation.

The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C- Compliance Monitoring Plan-Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Monthly inspections shall be preformed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventative measures shall be performed as prescribed in the Preventative Maintenance Plan.

D.1.11 Visible Emissions Notations

(a) Daily visible emission notations of the Robot Plastic Parts Spray Booth stack exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.12 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain records including the amount and HAP content of each coating material and solvent used shall be recorded. Records shall include material safety data sheets (MSDS) and other records necessary to verify the type and amount used that may include purchase orders and invoices. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents, a log of the dates of use, and the total HAP usage for the month.

(b) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with one (1) through eight (8) below. Records maintained for (1) through (7) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.2; and to document the quantity of any VOC shipped offsite and deducted from total reported VOC usage.

(1) The amount and VOC content of each coating material and solvent used shall be recorded. Records shall include material safety data sheets (MSDS) and other records necessary to verify the type and amount used that may include purchase orders and invoices. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The quantity of cleanup solvent shipped out each month. Non-VOC waste shall not be commingled with VOC containing waste, if the VOC content of waste shipped offsite is deducted from the reported monthly VOC usage.

(3) A log of the dates of use;

(4) The volume weighted VOC content of the coatings used for each month;

(5) The cleanup solvent usage for each month;

(6) The total VOC usage for each month, and;

(7) The weight of VOCs emitted for each compliance period.

(8) The results of the laboratory analysis of the VOC content of the solvent collected and drummed for disposal offsite. A representative sample of the VOC solvent to be shipped offsite shall be analyzed each quarter if the solvent VOC content is deducted from the monthly VOC usage reported. After one year from the issuance date of this permit the source may request to have the frequency of analysis changed. Volatile Organic Compound (VOC) is defined in 326 IAC 1-2-90.

(c) To document compliance with condition D.1.10, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventative Maintenance Plan.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.13 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Condition D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

(b) Records used to determine VOC and HAP use shall include the coating, thinner and clean up solvent usage, material safety data sheet (MSDS) and any additional information necessary to determine the VOC and HAP content, and the date of use. The laboratory analysis of the representative VOC content and the quantity of the solvent collected and drummed for disposal offsite shall be used to determine the VOC shipped offsite, if the solvent VOC content is deducted from the monthly VOC usage reported.

(c) A material safety data sheet (MSDS) and any additional information necessary to determine the VOC and HAP content for each coating and solvent shall be available for inspection at the facility, and the most accurate information available shall be used in determining VOC and HAP usage. The VOC content of the solvent collected and drummed for disposal offsite shall be reported in each quarterly report if the solvent VOC content is deducted from the monthly VOC usage report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Source Modification Quarterly Report

Source Name: Grote Industries, Inc.
Source Address: 2600 Lanier Drive, Madison, Indiana 47250
Mailing Address: 2600 Lanier Drive, Madison, Indiana 47250
Source Modification No.: 077-11312-00003
Facility: Robot Plastic Parts Spray Booth
Parameter: HAPs
Limit: Less than 10 tons per year and single HAP and less than 25 tons per year any combination of HAPs

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Part 70 Source Modification Quarterly Report

Source Name: Grote Industries, Inc.
Source Address: 2600 Lanier Drive, Madison, Indiana 47250
Mailing Address: 2600 Lanier Drive, Madison, Indiana 47250
Source Modification No.: 077-11312-00003
Facility: Robot Plastic Parts Spray Booth
Parameter: VOC
Limit: Less than 25 tons per year

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Part 70 Minor Source Modification.

Source Background and Description

Source Name:	Grote Industries, Inc.
Source Location:	2600 Lanier Drive, Madison, Indiana 47250
County:	Jefferson County
SIC Code:	3647
Operation Permit No.:	077-7670-00003
Minor Source Modification No.:	077-11312-00003
Permit Reviewer:	Lynn Nieman

The Office of Air Management (OAM) has reviewed a modification application from Grote Industries, Inc. relating to the construction of the following emission units and pollution control devices:

(a) One (1) Robot Plastic Parts Paint Spray Booth, with a maximum capacity of 600 units per hour, exhausting to stack 3-45 and utilizing dry filters as a control device.

(b) One (1) Natural Gas Fired Oven with a maximum heat input capacity of .021 MMBtu/hr, exhausting to stack 3-46.

History

On August 30, 1999, Grote Industries submitted an application to the OAM requesting to add the additional surface coating line to their existing plant. Grote Industries has a Part 70 permit that has not yet been issued.

Enforcement Issue

The source has the following enforcement action pending:
A Notice of Violation was issued on September 27, 1999. Grote has sixty days in which to chose whether to pursue an agreed order. The violation included the three unpermitted booths and one mask washer, and the corresponding violation of 326 IAC 8-2-9 regarding the unpermitted booths.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
3-45	Robot Plastic Parts Spray Booth	34	1.5	3540	Ambient
3-46	Natural Gas Fired Oven	34	0.83	500	250

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 30, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year) Before any limitations or controls
PM	14.36
PM-10	14.36
SO_2	--
VOC	59.92
CO	--
NO_x	--

HAP's	Potential To Emit (tons/year)
Ethyl Benzene	26.57
MIBK	20.08
Xylene	82.66
Tolulene	41.5
MEK	5.05
Hexamethylene Diisocyanate	0.07
Glycol Ethers	2.64
Ethylene Glycol	0
Total HAPs	178.57

Justification for Modification

The Part 70 Operating permit has not yet been issued and this is an approval to construct and operate this minor source modification. The source is being modified through a Part 70 Minor Source Modification pursuant to 326 IAC 2-7-10.5(d)(4)(B)(iii), modifications that would have a potential to emit less than twenty-five (25) tons per year and equal to or greater than ten (10) tons per year of Volatile Organic Compounds. This modification will be limited to less than 25 tons per year of VOC and less than 10 tons per year of any single HAP and less than 25 tons per year of any combination of HAPs.

County Attainment Status

The source is located in Jefferson County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Jefferson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Jefferson County has been classified as attainment or unclassifiable for PM-10. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	120.18
PM-10	120.18
SO_2	0.02
VOC	166.57
CO	0.72
NOx	3.42

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

(b) These emissions are based upon the Title V permit application information submitted by the source.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Robot Plastic Parts Spray Booth	14.36	14.36	--	24	--	--	24 combination of HAPs and 10 for any single HAP
Natural Gas Fired Oven	.001	.001	--	.001	.0080	.009	--
Entire Source PSD Levels	250	250	250	250	250	250	--

This modification to an existing minor stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 Maximum Achievable Control Technology (MACT)

Hazardous Air Pollutants (HAPs) shall be limited to less than ten (10) tons per twelve (12) consecutive months for a single HAP and less than twenty-five (25) tons per year for any combination of HAPs. Compliance with this limit shall render 326 IAC 2-4.1-1 (Maximum Achievable Control Technology) and 40 CFR 63.43 (Maximum Achievable Control Technology) not applicable.

326 IAC 8-1-6 Best Available Control Technology (BACT)

The input of VOC to the plastic parts surface coating booth, installed after January 1, 1980, shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period including coatings, dilution solvents, and cleaning solvents minus any VOC solvent shipped out. This usage limit is required to limit the potential to emit of VOC to less than twenty-five (25) tons per twelve (12) consecutive month period from each booth. Compliance with this limit shall render 326 8-1-6 (Best Available Control Technology), 326 IAC 2-2 (Prevention of Significant Deterioration), and 40 CFR 52.21 not applicable.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) emission rate from the plastic parts surface coating booth shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The dry filters shall be in operation at all times the surface coating booths are in operation, in order to comply with this limit.

State Rule Applicability - Insignificant Activities

There are no applicable rules for the insignificant activities.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

1. The Robot Plastic Parts Spray Booth has applicable compliance monitoring conditions as specified below:

    (a) Daily visible emissions notations of Robot Plastic Parts Spray Booth shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

    These monitoring conditions are necessary because visible emissions are necessary in order to ensure compliance with 326 IAC 6-3-2 (Process Operations).

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 077-11312-00003.

Appendix A: Emissions Calculations
Calculations to show "as applied" (paint + thinner ration)
Grote Industries, Inc.
Madison, Indiana
077-11312-00003

Paint 36000195

Density = (density of enamel)(ratio of enamel) + (density of thinner)(ratio of thinner)
= (7.86)(.8333) + (6.59)(.1667)
= 7.65

Weight % Volatile = (wt % vol of enamel)(ratio of enamel) + (wt % vol of thinner)(ratio of thinner)
= (63.9 %)(.8333) + (100)(.1667)
= 69.92%

Pounds of VOC per gallon of coating "as applied"
= (Density)(Weight % Volatile) / 100
= (7.65)(69.92)/100
= 5.35

Paint 36000240

Density = (density of enamel)(ratio of enamel) + (density of thinner)(ratio of thinner)
= (7.94)(.9091) + (6.59)(.0909)
= 7.82

Weight % Volatile = (wt % vol of enamel)(ratio of enamel) + (wt % vol of thinner)(ratio of thinner)
= (65.81)(.9091) + (100)(.0909)
= 68.92 %

Pounds of VOC per gallon of coating "as applied"
= (Density)(Weight % Volatile) / 100
= (7.82)(68.92)/100
= 5.39 %

Paint 36000124

Density = (density of enamel)(ratio of enamel) + (density of thinner)(ratio of thinner)
= (9.73)(.7595) + (6.59)(.2405)
= 8.97

Weight % Volatile = (wt % vol of enamel)(ratio of enamel) + (wt % vol of thinner)(ratio of thinner)

= (48.31)(.7595) + (100)(.2405)
= 60.74

Pounds of VOC per gallon of coating "as applied"
= (Density)(Weight % Volatile) / 100
= (8.97)(60.74)/100
= 5.45

Paint 36000282

Density = (density of enamel)(ratio of enamel) + (density of thinner)(ratio of thinner)
= (9.87)(.9091) + (6.76)(.0909)
= 9.59

Weight % Volatile = (wt % vol of enamel)(ratio of enamel) + (wt % vol of thinner)(ratio of thinner)
= (43.03)(.9091) + (100)(.0909)
= 48.21 %

Pounds of VOC per gallon of coating "as applied"
= (Density)(Weight % Volatile) / 100
= (9.59)(48.21%)/100
= 4.62

Paint 36000265

Density = (density of enamel)(ratio of enamel) + (density of thinner)(ratio of thinner)
= (8.10)(.100) + (0)
= 8.10

Weight % Volatile = (wt % vol of enamel)(ratio of enamel) + (wt % vol of thinner)(ratio of thinner)
= (54.8)(.100) + (0)
= 54.8 %

Pounds of VOC per gallon of coating "as applied"
= (Density)(Weight % Volatile) / 100
= (8.10)(54.8%)/100
= 4.44

Paint 36000257

Density = (density of enamel)(ratio of enamel) + (density of thinner)(ratio of thinner)
= (10.47)(.50) + (6.59)(.50)

= 8.53

Weight % Volatile = (wt % vol of enamel)(ratio of enamel) + (wt % vol of thinner)(ratio of thinner)
= (43.8)(.5) + (100)(.5)
= 71.9

Pounds of VOC per gallon of coating "as applied"
= (Density)(Weight % Volatile) / 100
= (8.53)(71.9)/100
= 6.13

Paint 36000281

Density = (density of enamel)(ratio of enamel) + (density of thinner)(ratio of thinner)
= (7.55)(.7097) + (6.59)(.2903)
= 7.27

Weight % Volatile = (wt % vol of enamel)(ratio of enamel) + (wt % vol of thinner)(ratio of thinner)
= (77.4)(.7097) + (100)(.2903)
= 83.96

Pounds of VOC per gallon of coating "as applied"
= (Density)(Weight % Volatile) / 100
= (7.27)(83.96) / 100
= 6.10

Paint 36000277

Density = (density of enamel)(ratio of enamel) + (density of thinner)(ratio of thinner)
= (8.20)(.7097) + (6.59)(.2903)
= 7.73

Weight % Volatile = (wt % vol of enamel)(ratio of enamel) + (wt % vol of thinner)(ratio of thinner)
= (64.90)(.7097) + (100)(.2903)
= 75.08

Pounds of VOC per gallon of coating "as applied"
= (Density)(Weight % Volatile) / 100

= (7.73)(75.08)/100
= 5.81

Paint 361 SL

Density = (density of enamel)(ratio of enamel) + (density of thinner)(ratio of thinner)
= (9.37)(.1) + (0)
= 9.37

Weight % Volatile = (wt % vol of enamel)(ratio of enamel) + (wt % vol of thinner)(ratio of thinner)
= (61.93)(.1) + (0)
= 61.93%

Pounds of VOC per gallon of coating "as applied"
= (Density)(Weight % Volatile) / 100
= (9.37)(61.93%)/100
= 5.81

Paint 206LE11780

Density = (density of enamel)(ratio of enamel) + (density of catalyst)(ratio of catalyst)
= (8.51)(.9286) + (8.48)(.0714)
= 8.51

Weight % Volatile = (wt % vol of enamel)(ratio of enamel) + (wt % vol of catalyst)(ratio of catalyst)
= (52.89)(.9286) + (39.34)(.0714)
= 51.92 %

Pounds of VOC per gallon of coating "as applied"
= (Density)(Weight % Volatile) / 100
= (8.51)(51.92%)/100
= 4.42

Cleanup Solvent (USED WITH ALL COATINGS)

Density = (density of enamel)(ratio of enamel) + (density of thinner)(ratio of thinner)
= (7.22)(.1) + (0)
= 7.22

Weight % Volatile = (wt % vol of enamel)(ratio of enamel) + (wt % vol of thinner)(ratio of thinner)
= (100)(.1) + (0)
= 100

Pounds of VOC per gallon of coating "as applied"
= (Density)(Weight % Volatile) / 100
= 7.22 (100%)/100
= 7.22

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Grote Industries
Address City IN Zip: 2600 Lanier Drive
Plt ID: 077-11313-00003
Reviewer: Lynn Nieman
Date: 10-15-1999

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
36000195	7.7	69.92%	0.0%	69.9%	0.0%	30.10%	0.01000	240.000	5.35	5.35	12.84	308.10	56.23	12.09	17.77	50%
36000240	7.8	68.92%	0.0%	68.9%	0.0%	31.10%	0.00220	240.000	5.39	5.39	2.85	68.30	12.46	2.81	17.33	50%
36000124	9.0	60.94%	0.0%	60.9%	0.0%	39.10%	0.01000	120.000	5.47	5.47	6.56	157.43	28.73	9.21	13.98	50%
36000282	9.6	48.21%	0.0%	48.2%	0.0%	51.79%	0.00220	600.000	4.62	4.62	6.10	146.47	26.73	14.36	8.93	50%
36000265	8.1	54.80%	0.0%	54.8%	0.0%	45.20%	0.00330	480.000	4.44	4.44	7.03	168.75	30.80	12.70	9.82	50%
36000257	8.5	71.90%	0.0%	71.9%	0.0%	28.10%	0.00360	600.000	6.13	6.13	13.25	317.94	58.02	11.34	21.83	50%
36000281	7.3	83.96%	0.0%	84.0%	0.0%	16.00%	0.01000	120.000	6.10	6.10	7.32	175.79	32.08	3.06	38.15	50%
36000277	7.7	75.08%	0.0%	75.1%	0.0%	24.90%	0.01000	120.000	5.80	5.80	6.96	167.15	30.50	5.06	23.31	50%
361SL	9.4	61.93%	54.9%	7.0%	0.0%	38.07%	0.01000	120.000	0.66	0.66	0.79	18.92	3.45	9.37	1.73	50%
206LE1780	8.5	51.92%	0.0%	51.9%	0.0%	48.10%	0.00440	120.000	4.42	4.42	2.33	55.99	10.22	4.73	9.19	50%
Cleanup Solvent	7.2	100.00%	0.0%	100.0%	0.0%	0.00%	0.00010	600.000	7.22	7.22	0.43	10.40	1.90	0.00	ERR	50%
State Potential Emissions			**Add worst case coating to all solvents**								**66.47**	**1595.21**	**291.13**	**84.74**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Name: Grote Industries, Inc.
Address City IN Zip: 2600 Lanier Drive, Madison, IN 47250
Plt ID: 077-11313-00003
Reviewer: Lynn Nieman
Date: 10-20-1999

Natural Gas Fired Oven

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.021	0.2

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.000	0.001	0.000	0.009	0.001	0.008

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).